

WE CLAIM:

1. A method for troubleshooting a computer system,
comprising:

receiving, at a location remote to the computer
system, a request for problem analysis for the computer
5 system in response to an occurrence of a problem;

receiving data corresponding to the computer system
comprising a core file from the computer system and
supplemental configuration information;

accessing a knowledge store storing phases, wherein
10 each phase includes a set of scripts adapted to identify
previously identified computer problems;

performing a phased analysis of the computer system
data comprising completing at least two of the phases
from the knowledge store; and

15 generating an output report including a list of the
computer problems identified during the performing.

2. The method of claim 1, wherein the core file
comprises a memory image created by the computer system
in response to a kernel error, a hardware error, an
application error, or other computer system error.

3. The method of claim 1, wherein each of the
phases includes an optimization mechanism operable such
that the phases executed in the performing is less than
the set of the phases, wherein the optimization mechanism
5 functions to check a list of static preconditions and to
compare the static preconditions to the received computer
system data.

4. The method of claim 3, wherein the static
preconditions include variables selected from the group
consisting of operating system identifications, operating
system releases, software packages, software packages

5 releases, system architectures, platforms, patch levels,
and panic strings.

5. The method of claim 1, wherein the data
receiving includes communicating with the computer system
from the remote location over a communications network.

6. The method of claim 1, wherein the phased
analysis performing includes parsing the computer system
data into a source independent format and wherein the
parsed computer system data is used as input for
5 subsequent ones of the analysis phases.

7. The method of claim 1, wherein the phased
analysis performing comprises a sequential analysis using
the analysis phases to process a memory image from the
computer system to create at least one corrective action
5 for inclusion in the output report.

8. The method of claim 7, wherein the analysis
phases are selected from the group consisting of a
hardware error scan, a bug analysis, a user core file
analysis, a kernel core file analysis, a parse of the
5 computer system data into context free format, a check
for bad patches, a check for software configuration and
version, a check for hardware configuration and version,
a software error scan, an infodoc check, a faq check, an
srdb check, an stb/white paper check, retrieval of down
10 revision patches, a security issue check, a system health
check, a storage-related check, a platform analysis, a
performance analysis, a kernel configuration check, and
third party checks.

9. The method of claim 7, wherein the analysis
phases each generate an intermediate output report for

use by later performed ones of the analysis phases and for inclusion in the output report.

10. A service guru system for at least partially automatically processing a core file and supplemental data from a computer system to identify problems and recommend corrective actions, comprising:

5 a memory device for storing descriptions of previously identified problems, the memory device configured with executable scripts adapted for running within the service guru system; and

10 a service guru tool linked to the memory device to access and run the executable scripts to process the core file and the supplemental data from the computer system to identify matching ones of the previously identified problems.

11. The system of claim 10, wherein the service guru tool is further configured to create an output report including at least one of corrective actions, patch recommendations, workarounds, reference
5 documentation, or bug descriptions that are determined by the service guru tool to be relevant to the computer system.

12. The system of claim 10, wherein the service guru tool is located on an analyst node that is communicatively-linked with a communications network, the computer system is communicatively-linked to the computer
5 system, and the service guru tool is configured for accessing the computer system to obtain a memory image and to retrieve additional configuration and other system information from the computer system.

13. A method for reactively troubleshooting and proactively controlling problems on a computer system, comprising:

5 collecting data corresponding to the computer system;

 accessing a knowledge store of previously identified computer system problems;

 parsing the collected data into a context-free, language-independent format;

10 building a list of analysis phases to run on the collected data;

 running each phase in the list using the collected data; and

15 generating an analysis report based on output data from at least some of the analysis phases run.

14. The method of claim 13, wherein each phase comprises a plurality of scripts and wherein the running of each phase includes first performing a static precondition check for the phase to determine if a subset
5 of the scripts applies to the computer system to improve run times by reducing the scripts executed during running.

15. The method of claim 14, wherein the scripts comprise testing the collected data for an instance of a problem, issuing a reactive output when the instance is found in the testing, and issuing a proactive output when
5 the instance is not found and the problem is determined to possibly occur within the computer system.

16. The method of claim 15, wherein the reactive output and the proactive output includes supplemental data for each of the problems comprising type, severity, comment, and derived information.

17. The method of claim 16, wherein a type is proactive, reactive, or not applicable.

18. The method of claim 16, wherein a severity ranges from most to least severe and is selected from the group consisting of data error, system hang, system panic, device hang, application hang, application crash,
5 error warning message, system maintenance issue, administration issue, informational message, and impaired functionality.

19. The method of claim 16, wherein a comment is sequential text selected to be useful in interpreting the problems.

20. The method of claim 16, wherein a derived information includes information extracted from a service repository.